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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re application of: | NAZARIAN, et al. | Group Art Unit No.: 2615 |
| Serial Number: | 09/401,069 | Examiner: Onuaku, C. |
| Filing Date: | September 22, 1999 | Att'y Docket: K35A0545 |
| Title: | DISK DRIVES AND DISK DRIVE-CONTAINING DEVICES HAVING SELECTIVELY CONTROLLABLE AND/OR ADAPTIVE QUIET AND HIGH PERFORMANCE MODES OF OPERATION | |

CERTIFICATE OF TRANSMISSION

I hereby certify that this Amendment and the document(s) referred to herein is/are being transmitted by facsimile to the Assistant Commissioner for PATENTS, United States Patent and Trademark Office, Washington, D.C. at Fax No. 703-872-9314 on September 18, 2002.

Signature of Person Transmitting Document(s)

ALAN W. YOUNG
Printed Name

Official

Honorable Commissioner for Patents
Washington, DC 20231

9-18-02

AMENDMENT

Sir:

Responsive to the Office Action dated June 20, 2002, please amend the above-referenced application as follows:

**IN THE CLAIMS**

Please amend the claims as follows:

1. (Amended) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means including a disk drive control program and detection means for detecting a characteristic of the data stream, one of the quiet seek operating mode and the higher performance seek operating mode being invoked depending upon the detected characteristic;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

Cancel claim 6;

Cancel claim 7;

78. (Amended) The disk drive of claim 1, wherein the second means comprises detection means for detecting a data stream length, the quiet seek operating mode being invoked whenever the data stream length reaches a threshold length.

Please add the following new claims:

3537. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means including a disk drive control program and detection means for detecting a data stream length, the quiet seek operating mode being invoked whenever the data stream length reaches a threshold length;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the

first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

36 ~~38~~. (New) The disk drive of claim 35 ~~37~~, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

37 ~~39~~. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means comprising means for measuring an ambient acoustic level, the measuring means invoking the quiet seek operating mode whenever the ambient acoustic level reaches a selectable threshold;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

38 ~~40~~. (New) The disk drive of claim 37 ~~39~~, wherein the measuring means includes a microphone.

39 ~~41~~. (New) The disk drive of claim 37 ~~39~~, wherein the second means comprises means for measuring an ambient acoustic level and wherein the measuring means invokes a selected

one of a plurality of quiet seek operating modes depending upon the measured ambient acoustic level.

40 ~~42~~. (New) The disk drive of claim 37 ~~39~~, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

41 ~~43~~. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

time keeping means, at least one of the first and second means being responsive to a signal from the time keeping means to selectively switch between the higher performance seek operating mode and the quiet seek operating mode depending upon a time of day.

42 ~~44~~. (New) The disk drive of claim 41 ~~43~~, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the

second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

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45. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means defining a plurality of mutually different quiet seek operating modes, each of the plurality of quiet seek operating modes causing the drive to operate with mutually different levels of audible noise, the second means comprising means for measuring an ambient acoustic level, the measuring means invoking a selected one of the plurality of quiet seek operating modes depending upon the measured ambient acoustic level;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

44 43
46. (New) The disk drive of claim 45, wherein the measuring means includes a microphone.

45 43
47. (New) The disk drive of claim 45, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the





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second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

~~48~~ 46. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

media, the media being formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations.

~~49~~ 47. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on

average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

a host interface, the second means comprising a first host command received by the host interface, the quiet seek mode being active for executing the first host command, and the disk drive autonomously reverting to the higher performance seek mode after the first host command is completed.

**REMARKS**

This amendment is responsive to the Office Action issued June 20, 2002. In reliance upon the indication of allowable subject matter, Applicant has amended claim 1 to include the subject matter of allowable claim 8 and that of intervening claim 6. Claims 6 and 7 are cancelled herewith. Claims 19-36 are allowed. New claims 37-49 are included herewith. Accordingly, Claims 1-5, and 8-49 are pending in the present application. The Commissioner is hereby authorized to charge excess claims fees to Deposit Account No. 23-1209 (Western Digital Corporation).

To facilitate the Examiner's study of the new claims, the following sets out the makeup of the new claims.

New independent claim 37 includes the limitations of claims 1, 6 and 7;

New independent claim 39 includes the limitations of claims 1, 6 and that of allowable claim 8.

New independent claim 43 includes the limitations of claims 1 and 10;

New independent claim 45 includes the limitations of claims 1, 13 and 16;

New independent claim 48 includes the limitations of claims 1 and 18, and

New independent claim 49 includes the limitations of claims 1, 2 and 3.

As the Examiner will note from the following, each of the new independent claims is independently patentable relative to the cited references and arguments clearly setting out the reasons therefor are included below.

Claims 1-7, 9-10 and 12-18 were rejected as being anticipated by Singer et al., US 6,314,473. Reconsideration and withdrawal of these rejections are respectfully requested, for the following reasons.

As foreshadowed above, the following will present arguments drawn to each of the independent claims in turn.

**Amended Claim 1**

Amended claim 1 recites that the second means for defining the quiet seek operating mode includes "detection means for detecting a characteristic of the data stream, one of the quiet seek operating mode and the higher performance seek operating mode being invoked depending upon the detected characteristic". The cited passages in Singer do not teach or suggest the claimed detection means for detecting a characteristic of the data stream, nor any means for invoking different operating modes depending upon the detected characteristic. That the Singer reference teaches a Graphical User Interface (GUI) or various input devices for generating commands does not rise to the level of teaching the claimed detection means for detecting a characteristic of the data stream.

The Examiner asserts that the claimed detection means is inherent in Singer, "since the GUI controller 29 responds to the settings (characteristic) by controlling the disk drive 10...". However, the Examiner will note that claim 1 calls for detection means that detect a characteristic of the data stream, and not that of a user interface. The Singer reference does not teach that the Quick or Quiet modes of operation are in any way invoked upon the detection of a characteristic of the data stream. To the contrary, it appears that Singer's Quick and Quiet seek modes are only invoked by the user acting upon the user interface (GUI) – and not incident to a

detection of any characteristic in the data stream by the drive itself. Therefore, it appears that the Examiner's reliance upon inherency is in factually in error and that the cited reference does not teach the subject matter of amended claim 1.

New Claim 37

Amended claim 1 includes the limitations of the originally-filed claim 1 and that allowable claim 8 and intervening claim 6. Amended claim 1, therefore, is allowable.

New Claim 39

Claim 39 incorporates the subject matter of claims 1 and 10 and recites "second means for defining a quiet seek operating mode, the second means comprising means for measuring an ambient acoustic level, the measuring means invoking the quiet seek operating mode whenever the ambient acoustic level reaches a selectable threshold".

With regard to the rejection of claim 10, the Examiner stated that the claimed second means was taught at least at Column 9, lines 13-47 in Singer. Therein, Singer states that

> **"For the purposes of the subject application, a "good move" is defined as a movement of a system component along a trajectory from an initial position to a nominal final position, such that, at the time the component reaches its nominal final position, the component is vibrating at or below an acceptable level, possibly subject to one or more predetermined constraints. In the context of computer disk drives, this means that, as soon as the drive's head reaches its nominal final position, the head is ready to perform a read/write operation to a recording medium. A good move is also one in which acoustic noise excited by the move is at or below an acceptable threshold. In contrast, a "bad move" is, for example, a move in which the component is vibrating at an unacceptable level when the component reaches its nominal final position. In the context of computer disk drives, this means that at the time the drive's head reaches its nominal final position, the head is vibrating at a level which is too high to perform a read/write operation accurately. A bad move is also one in which the acoustic noise excited by the move is above an acceptable threshold." (Emphasis added)**

Therefore, it is clear that Singer is referring to moving the read/write head such that it reaches its final position while vibrating at or below an acceptable level. In this context, Singer defines a good move as being one in which acoustic noise excited by the move is at or below an acceptable threshold. A bad move is one in which the noise is unacceptable. There is

demonstrably no teaching or suggestion of any measuring of ambient noise levels nor any mode of operation depending upon the measured ambient noise, as required by claim 39. In Singer, the only way to change the seek operating mode between Quick and Quiet is through the user interface. No teaching of any measuring means that is configured to invoke different modes of operation (without recourse to the user interface) is present in this reference. It is only the present invention that teaches such a measuring means that is effective to invoke the quiet seek operating mode whenever the ambient acoustic level reaches a selectable threshold. Singer, to the contrary, teaches to alter the inputs to the system such that only good moves result – that is, such that the read/write heads move with an acoustic noise that is at or below an acceptable threshold. That the Singer reference also uses the terms "acoustic" and "threshold" does not, without more, teach the invention of claim 10.

**New Claim 43**

Claim 43 includes the limitations of originally filed claim 1 and that of claim 12. However, to claim the intended meaning with greater specificity, the phrase "clock means" previously in claim 12 has been replaced with the phrase "time keeping means" – like a clock that keeps time (e.g., 3:15 pm ...). Claim 43 recites that the disk drive also includes "time keeping means, at least one of the first and second means being responsive to a signal from the time keeping means to selectively switch between the higher performance seek operating mode and the quiet seek operating mode depending upon a time of day." Therefore, as claimed, the first and/or second means are responsive to a signal from the time keeping means to selectively switch between the higher performing and quiet seek operating modes depending upon the time of day (such as at 3:15 pm, for example).

Singer teaches no such thing. The Examiner points to Column 33, lines 31-65 as teaching this claimed feature. However, Singer is referring to a high frequency clock that counts

until a desired switch time is achieved. Here, the clock count controls the voltage switch time that is used, in Singer, to control the VCM current that controls the movement of the read/write heads of the drive. See section 5.6 of Singer, at Column 24, lines 45-56:

> **"5.6 Voltage Control by Forcing Switch Times**
>
> **Disk drives operate in a current command mode, meaning that their operation is controlled by current commands. Since saturation is in voltage, conventionally there is no way to determine if a particular current command will saturate the system (notwithstanding section 3.1 above). Accordingly, commanding the system in current can fail to produce a desired movement. The invention addresses this problem by commanding a current that is guaranteed to saturate a voltage input to the system. In this way, the invention is able to command voltage in either direction. That is, it is possible to provide current commands to the system, but actually to be commanding voltages switches."**

See Column 30, lines 22 – 26:

> **"As noted above, the continuous form of the partial fraction expansion equations can also be solved for voltage switch times which reduce vibrations in the system. A voltage switch time corresponds to a transition time between full positive and full negative voltage inputs to the system. In solving for these switch times, if no other constraints are included, the system can be modeled using the three partial fraction expansion equations..."**

Therefore, the "switch time" referred to in Singer and relied upon by the Examiner cannot be "any time of day", as asserted in the Office Action. Instead, the switch time referred to in Singer is the transition time between full positive and negative voltage inputs to the system. Nothing in the Singer patent teaches or suggests that the disk drives disclosed therein are configured to switch between operating modes depending upon the time of day, as required by claim 43. Lacking such teaching, the anticipatory rejection is in error and must be withdrawn.

<u>New Claim 45</u>

Claim 45 includes the limitations of originally filed claims 1, 13 and 16. The Office Action rejected claim 16 on the same basis as claim 10 was rejected. The factual arguments above relative

to claim 39, therefore, are equally applicable here and are incorporated herein as if re-stated herein in full.

Moreover, claim 45 recites a plurality of quiet seek operating modes, each with different levels of audible noise and means for measuring ambient acoustic level and for selecting one of the plurality of quiet seek operating modes depending upon the measured acoustic level. Singer does not measure ambient acoustic levels and does not teach any functionality to selecting one of a plurality of quiet seek operating modes depending upon the measured acoustic level. Neither the passage at Column 9, lines 13-47 contrasting "good" versus "bad" moves nor the remainder of the Singer reference teaches the invention of claim 45.

**New Claim 48**

New claim 48 includes the limitations of originally filed claims 1 and 18. As claimed, the disk drive of claim 48 includes:

> **"media, the media being formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations"**

The Office action asserts that such media formatted into first and second disk portions for quiet and performance seek respective operations is somehow taught in Figs. 2, 3 and 4 and in Column 6, line 33 to Column 7, line 49. However, these passages do not teach <u>any</u> formatting of the disk media, and much less formatting the media into first and second portions for quiet and performance seek operations, respectively. The rejection of claim 18 in the Office Action goes on to discuss Singer's user interface (GUI), which is believed to be irrelevant to the formatting of the media. The Singer reference simply does not teach the claimed formatting of the media.

**New Claim 49**

New claim 49 includes the limitations of originally filed claims 1 and 3. To emphasize that the drive switches by itself (with no user interaction through a GUI or any other input means), claim 49 recites that the disk drive "autonomously reverts" to the higher performance seek mode after the first host command is completed. This was the intended meaning of the term "reverts" in originally filed claim 3. As noted above, Singer relies upon a slider 30 in the GUI to switch between Quick and Quiet operating modes. Singer does not teach or suggest a drive that autonomously (by itself) reverts back to the higher performance mode of operation after completion of a host command. While it is true that a user can manually switch Singer's drive between operating modes by manipulating the slider bar 30, Singer's drive cannot do so autonomously. Therefore, claim 49 defines subject matter that is neither taught nor suggested in the applied reference.

Applicant's attorney believes that no new matter has been introduced by the present amendment, that all claims are allowable as incorporating allowable subject matter and that the present application in condition for an early and rapid allowance and passage to issue. If any unresolved issues remain, please contact the undersigned attorney of record at the telephone number indicated below.

Respectfully submitted,

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By: _____

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Date: September 18, 2002

**MARKED VERSION TO SHOW AMENDMENTS MADE**

1. (Amended) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode **the second means including a disk drive control program and detection means for detecting a characteristic of the data stream, one of the quiet seek operating mode and the higher performance seek operating mode being invoked depending upon the detected characteristic**;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

Cancel claim 6;

Cancel claim 7;

8. (Amended) The disk drive of claim ~~6~~ 1, wherein the second means comprises detection means for detecting a data stream length, the quiet seek operating mode being invoked whenever the data stream length reaches a threshold length.

37. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means including a disk drive control program and detection means for detecting a data stream length, the quiet seek operating mode being invoked whenever the data stream length reaches a threshold length;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

38. (New) The disk drive of claim 37, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

39. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means comprising means for measuring an ambient acoustic level, the measuring means invoking the quiet seek operating mode whenever the ambient acoustic level reaches a selectable threshold;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively

short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

40. (New) The disk drive of claim 39, wherein the measuring means includes a microphone.

41. (New) The disk drive of claim 39, wherein the second means comprises means for measuring an ambient acoustic level and wherein the measuring means invokes a selected one of a plurality of quiet seek operating modes depending upon the measured ambient acoustic level.

42. (New) The disk drive of claim 39, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

43. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the

first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

time keeping means, at least one of the first and second means being responsive to a signal from the time keeping means to selectively switch between the higher performance seek operating mode and the quiet seek operating mode depending upon a time of day.

44. (New) The disk drive of claim 43, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

45. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode, the second means defining a plurality of mutually different quiet seek operating modes, each of the plurality of quiet seek operating modes causing the drive to operate with mutually different levels of audible noise, the second means comprising means for measuring an ambient acoustic level, the measuring means invoking a selected one of the plurality of quiet seek operating modes depending upon the measured ambient acoustic level;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the

first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode.

46. (New) The disk drive of claim 45, wherein the measuring means includes a microphone.

47. (New) The disk drive of claim 45, wherein a media of the disk drive is formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations within the second disk portion.

48. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

media, the media being formatted into a first disk portion and a second disk portion, the first disk portion being formatted to designate the quiet seek operating mode for seek operations within the first disk portion and the second disk portion being formatted to designate the performance seek operating mode for seek operations

49. (New) A disk drive that selectively provides either higher-performance seek operations or reduced-audible noise while effecting a seek operation, the disk drive comprising:

first means for defining a higher performance seek operating mode;

second means for defining a quiet seek operating mode;

servo means for controlling seek operations, the servo means including means for defining a plurality of seek profiles including a first seek profile defined to provide relatively short average seek times and a second seek profile defined to provide quieter operation on average in comparison with the first seek profile, and means for effecting a seek subject to the first seek profile in response to the higher performance seek operating mode and for effecting a seek subject to the second seek profile in response to the quiet seek operating mode, and

a host interface, the second means comprising a first host command received by the host interface, the quiet seek mode being active for executing the first host command, and the disk drive autonomously reverting to the higher performance seek mode after the first host command is completed.